United States of America

Bepartment of Transportation -- Hederal Abiation Administration

Supplemental Type Certificate

Number SA1042EA

This certificate issued to

Northrop Grumman Commercial Aircraft Division Post Office Box 9015 Stuart, Florida 34995-9015

certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part 23/36 of the Federal Aviation *Regulations*.

Original Product -- Type Certificate Number:

Avions Marcel Dassault - Breguet Aviation

Falcon 10

Description of Type Design Change:

Installation of a hydraulically actuated target type thrust reverser system in accordance with Grumman Aerospace Corporation Installation Drawing No. C43B21000 and Master Drawing Index F10A-5-ACTR-MI Revision AJ dated November 4, 1987, and Installation Instructions No. PMFJC-MA76-6 Revision G dated January 11, 1983.

Limitations and Conditions :

- 1. AiResearch engine models TFE731-2 or -3 modified in accordance with STC SE1040EA, amended June 30, 1983, or November 17, 1987, prior to or concurrent with this modification are required with this installation.
- 2. This installation is approved for ground use only up to a maximum reverse thrust with fuel control computer in "ON" mode. The trust reversers are limited to 20,000 flight hours. (See Continuation Sheet, Page 2)

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application: February 14, 1974

Date of issuance: November 8, 1976

Date reissued: November 10, 1997

Date amended: 2/11/77, 5/31/77, 7/11/78,

10/1/81, 6/30/83, 11/17/87

By direction of the Administrator

Anthony Socias

Manager, Airframe and Propulsion Branch

New York Aircraft Certification Office

(Title)

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.

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Supplemental Type Certificate

(Continuation Sheet)

Number SA1042EA

Limitation and Condition (Continued):

- 3. Grumman Aerospace Corporation Flight Manual Supplement No. 1, Document No. PMFJC-MA76-4, Revision 7, FAA approved October 20, 1987, to the Falcon 10 Airplane Flight Manual is required with this installation.
- 4. Engine must be equipped with AiResearch bypass inner segment (air-cooler fairing) P/N 3072751-1 which has a life limit of 20,000 hours.
- 5. Grumman Aerospace Corporation Falcon 10 Maintenance Manual Supplement PMFJC-MA76-1, Revision 10, dated September 1987, and System Maintenance and Overhaul Manual with Illustrated Parts Lists for Thrust Reverser Model No. F1OA Document No. PMFJC-MA76-2, Revision 8, dated January 1983, are required for this installation.
- 6. Grumman Aerospace Corporation Flacon 10 Inspection Schedule is included in Falcon 10 Maintenance Manual Supplement PMFJC-MA76-1, Revision 10, dated September 1987.
- 7. This approval should not be extended to other specific airplanes of these models on which other previously approved modifications are incorporated unless it is determined that the interrelationship between this change and any of these other previously approved modifications will introduce no adverse effect upon the airworthiness of that airplane.
- 8. If the holder agrees to permit another person to use this certificate to alter the product, the holder shall give the other person written evidence of that permission.

NOTE: This installation incorporates multiple thrust reverser door locking devices, and automatic throttle retarder system, emergency stow switches and visual and aural warning indicators.